FCC Docket Number
WC Docket No. 02-60

FCC Pilot Program Quarterly Report
April - June 2010
Erlanger Health System

1. **Project Contract and Coordination Information**

a.b. Identify the project leader(s) and respective business affiliation

Douglas Fisher (Project Coordinator)
VP Government & Community Affairs
Erlanger Health System
975 East Third Street
Chattanooga TN 37403
423-778-9642
douglas.fisher@erlanger.org

Hale Booth (Associate Project Coordinator)
Executive Vice President
BrightBridge (formally Southeast Development Corporation)
PO Box 871
Chattanooga, TN 37401
423-667-2077
hbooth@BrightBridgeInc.org
Fax 423-424-4262

c. Responsible organization
Erlanger Health System
975 East Third Street
Chattanooga TN 37403

d. Coordination throughout the state or region.
Erlanger Health System management continues periodic informal discussions with other health care providers across the region regarding the network system as Erlanger seeks to meet specific needs of the individual health care providers.

2. Identify all health care facilities included in the network.

Network development has resulted in the investment of considerable time in defining and planning services, identifying and securing funding for necessary equipment and defining business relationships. Erlanger Health System has identified new resources and worked to structure key lead services such as telestroke care that will be initially delivered via telemedicine. Strategies have been developed and additional funding is being sought to reach beyond the initial FCC funded fiber network with additional non-FCC funded access to even more remote rural hospitals. Rapid growth of the rural healthcare network is very important to help scale the telemedicine program to insure quicker business success and economic viability. Funding has been requested from multiple sources to assist with costs of this expansion. For the initial core FCC funded rural fiber healthcare network the facilities listed below are primarily the same as those proposed in the application.

Copper Basin Medical Center 144 Medical Center Drive Copperhill TN 37317 RUCA Code 10 Census tract 9504 Contact Ray Ford, CEO, 423-496-5511	Public, non-profit eligible
Erlanger Bledsoe 128 Wheeler Town Road Pikeville, TN 37367 RUCA Code 10 Census Tract 9531 Contact Douglas Fisher, 423-778-9642	Public non-profit eligible
Erlanger Baroness 975 East Third Street Chattanooga, TN 37403 RUCA Code 1 Census tract 4 Contact Douglas Fisher 423-778-9642	Public non-profit eligible
Erlanger North 632 Morrison Springs Road Red Bank TN 36415 RUCA Code 1 Census Tract 109 Contact Douglas Fisher 423-778-9642	Public non-profit eligible

Hutcheson Medical Center 100 Gross Crescent Circle Fort Oglethorpe, GA 30742 RUCA Code 1 Census tract 307 Contact 706-858-2000	Public non-profit eligible
North Valley Medical Center 723 Rankin Avenue (US 127) Dunlap TN RUCA Code 10 Census Tract 601 Contact: Bill Harmon, 423-949-5100	Private For-profit eligible (Dedicated emergency department)
Rhea Medical Center 9400 Rhea County Highway Dayton TN 37321 RUCA Code 8 Census tract 9752 Contact; Ken Crooms CEO, 423-775-1121	Public non-profit eligible
Erlanger Womans/Erlanger East 1755 Gunbarrell Rd Chattanooga, TN 37421 RUCA Code 1 Census Tract 114.41 Contact; Douglas Fisher 423-778-9642	Public non-profit eligible
Murphy Medical Center 4130 U.S. Highway 64, East Murphy North Carolina 28906 RUCA Code 9 Census tract 9906 Contact: Mike Stevenson CEO, 828-835-7502	Public non-profit eligible

3. **Network Narrative:**
The competitive bidding process has not been initiated, so this section is not applicable.

4. **List of connected health care providers.**
Not applicable at this time.

5. **Identify the following non-recurring and recurring costs, where applicable show both as budgeted and actual incurred for the applicable quarter and funding year to date.**

	Budgeted	incurred
a. Network design	55,000	0
b. Network equipment	361,696	0
c. Infrastructure deployment		
i. Engineering	35,000	0
ii Construction	2,023,304	0
d. Internet2, NLR	0	0
e. Leased facilities	0	0
f. Network management, maintenance, O&M	0	0
g. other	111,600	0
Total	2,586,600	0

6. **Describe how costs have been apportioned and the sources of the funds to pay them.**

   a. Explain how costs are identified, allocated among and apportioned to both eligible and ineligible network participants.

   The network will initially only serve eligible participants. Generalized expansion plans have been developed and funding applications will continue to be submitted to serve a future broader range of rural hospitals, some of which are defined as ineligible participants for the FCC funded network. When non-FCC funding requests for this health care network expansion are successful and these additional rural hospitals become a part of the system, this issue of apportioning costs will be addressed with the funding agencies. It is anticipated that when the time comes to add ineligible network participants, EHS will assess a one time up front fee to these ineligible participants.

   EHS project partners have also successfully applied for additional funding opportunities available through the ARRA "stimulus bill" for use with the telemedicine network. In October 2009, major "stimulus" funding was announced by DOE for one of EHS's existing service providers which will positively benefit the rural healthcare network by paying for a portion of the need fiber construction, on which the healthcare network will ride.

   b. Describe the source of funds from:
      i. Eligible pilot program network participants.

      The initial matching funds contribution for assistance in network construction from the local non-profit Electric Power Board of

Chattanooga (EPB) was considered ineligible by the FCC Order issued on November 19, 2007. This complicated things for the project. Potential alternatives have been considered and pursued as sources of local matching funds. Some of these alternatives have been discussed with USAC staff and it was determined that these potential alternative sources of matching funds were not eligible, even though they were real program costs that must be incurred by Erlanger Health System. As a result, this past September the Board of Directors of BrightBridge Inc. (a non-profit economic development corporation assisting EHS with this project) approved the potential use of Direct Congressional Appropriation funds previously appropriated to BrightBridge Inc. for use in eligible construction activity to complete matching funding of the FCC project. During this reporting quarter BrightBridge staff traveled to Washington DC to meet with HUD officials who have financial oversight of these potential matching funds to review the proposed use of these Direct Appropriation funds to match the FCC grant. At this meeting HUD officials agreed this rural telemedicine network is an acceptable project which meets the guidelines of the grant and requested that staff submit a revised environmental assessment and other forms which are presently being prepared.

Erlanger Health System has also received $352,000 in additional 2008 project grant funds from USDA Rural Development for non FCC-eligible network equipment and has unsuccessfully sought Appalachian Regional Commission funding to expand the network fiber to a rural public primary care center and two rural public heath centers.

One of Erlanger Health System's existing service providers, the non-profit Electric Power Board of Chattanooga (EPB) received notice from DOE on October 27, 2009 that EPB's grant application for SmartGrid funding (which was prepared by BrightBridge Inc. and coordinated with the EHS rural healthcare network plans) has been selected for $111,567,606 in DOE funding to match a local commitment of $115,139,956. A significant portion of this new DOE funding will extend high speed fiber wall to wall across the multi-county service area of the Electric Power Board. This is a major project development for the Erlanger Rural Health Care Fiber Network because of this ARRA funding to EPB, it will create significant leverage for the FCC funded fiber network. Now there will be little if any FCC funded fiber required to be constructed in the large EPB service area as the healthcare network data can "ride" the EPB fiber. This will allow the FCC funded fiber to reach further into rural areas and help position the rural healthcare fiber network for future expansion. This additional fiber is currently being installed and should be in place and operational by December 31, 2010.

These very positive developments have cost the project schedule more time but are significantly benefiting the capital financial participation by eligible network participants and will likely reduce participant cost to an operating and maintenance fee which is being projected.

Erlanger and the various project partners are also moving toward a non-profit partnership for ownership, operation and maintenance of the network which results in the partners bringing matching cash equity to the project as well as other needed investments. The partnership under discussion would be Erlanger Health System, BrightBridge Inc. a SBA certified non-profit economic development corporation and likely some area public power distributors who have the staff and physical capability needed to maintain the fiber network. Structural arrangements for this partnership continue being developed.

ii. Ineligible network participants.

Not applicable (at this time).

c. Show contributions from all other sources

i. Identify source of financial support and anticipated revenues paying for costs not covered by the fund and by pilot program participants.

The FCC grant award for the Rural Healthcare Fiber Network has enabled the project to leverage an ever growing investment of federal and local funds to assist with costs not covered by the FCC grant.

Erlanger Health System is incurring costs for planning and project administration assistance. These costs are not covered by the grant and are currently being paid by Erlanger Health System. Grant eligible costs are not being incurred at this time as pre-bidding documentation (LOA's, FCC forms, etc) is being completed. However, the need for operating equipment to interface with the FCC funded fiber network is an essential component not funded by the FCC grant. Erlanger Health System successfully applied for telemedicine equipment funding in April 2008 from the USDA Rural Development Distance Learning Telemedicine program. This funding request was for non-FCC eligible network equipment to be located in rural Copper Basin Medical Center in Copperhill, Rhea County Medical Center in Dayton, Erlanger Bledsoe in Pikeville, North Valley Medical Center in Dunlap and Erlanger Baroness in Chattanooga. These telemedicine stations have been bid and purchased and are presently scheduled for remote deployment. They will initially operate over an existing patchwork system of lower capacity leased lines.

One of the key needs that emerged out of initial network planning with Copper Basin Medical Center involved tele-radiology. They are the only hospital in the first phase of the pilot project without a PACS or digital imaging system, from which important diagnostic imagery can be transmitted over the FCC funded network. A commitment of federal funding through the Appalachian Regional Commission was secured to assist with the purchase of a portion (fifty percent) of the PACS system, for Copper Basin Medical Center. The balance of funding for this system was included in the previously mentioned USDA Rural Development Distance Learning Telemedicine grant awarded to Erlanger by the USDA in September 2008. The PACS equipment was received by that hospital during the summer of 2009 and is now in use, during the current reporting quarter; EHS requested and disbursed the remaining USDA funds needed to complete the purchase payment for this PACS equipment.

On September 30, 2009, Erlanger Health System in partnership with Meigs County government, developed and submitted a grant request through the State of Tennessee to the Appalachian Regional Commission for $393,500 in ARC funds to expand the planned pilot network to serve a public primary care center in Meigs County Tennessee and two public health department facilities in McMinn and Meigs County Tennessee. During the reporting quarter, EHS learned the grant was not funded in the ARC FY 2010 cycle. EHS and Meigs County plan to resubmit the grant application in the fall of 2010 for consideration in the upcoming federal fiscal year

The most recent positive major financial investment as previously mentioned was the award of major DOE funding to the local non-profit Electric Power Board. Project administrative staff worked with the Electric Power Board of Chattanooga (EPB) to prepare, write and submit an ARRA SmartGrid Investment Grant Application to the Department of Energy. This grant application to the DOE Office of Electricity Delivery & Energy Reliability, while an electrical system application, included extensive installation of a high speed fiber communications network to all customers and areas of the multi-county EPB service area. The majority of these areas to be served by the grant are outside of the urban core of Chattanooga and are characterized as very rural. DOE announced $111,567,606 in grant funding for the project on October 27, 2009. These grant funds will match $115,139,956 in local funds. While not a direct part of the FCC funded project. This will significantly leverage FCC funding as it is paying for construction and development of some of the necessary fiber that had been previously planned to be installed with FCC project funds. This in turn will allow the FCC funded Rural Health Care Fiber Network additional construction contingency or possibly additional

fiber construction to potentially serve even more remote locations for the FCC funded healthcare network. In essence this could be a way to expand service to the previously mentioned rural public health centers in the region.

ii. Identify the respective amounts and remaining time for such assistance.

Raising eligible matching funds in the current economic environment has been a time consuming task which has delayed the project and has required a time extension to overcome.

The total FCC project budget submitted is $2,586,600. The source of funding is $2,198,610 from the FCC pilot grant and $387,990 in local matching funds which will come from an awarded Direct Congressional Appropriation grant to BrightBridge Inc.

Erlanger Health System is investing hundreds of thousands of dollars of local funds designated for purchase of network equipment necessary to manage and operate the fiber network. A large portion of this Erlanger investment, $228,065 has been expended on a codian bridge needed to manage the network. Additional Erlanger equipment funds are budgeted in the current fiscal year. Erlanger at one time had planned to use this equipment purchase as their match for the FCC grant but was advised that the equipment needed, (in particular the bridge component) to implement the network were not considered as eligible for match by the FCC, so the now the grant match has been reworked three times in development of an acceptable match.

Regarding the FCC ineligible equipment expenses discussed in 5 c. i. above, the Copper Basin Medical Center was awarded an Appalachian Regional Commission (ARC) grant for $260,884, for equipment funding. A large portion of this 50 percent matching grant was used to purchase a PACS electronic imaging system which is now in service providing medical digital images which will be transmitted over the FCC Pilot network to specialists at other hospitals. The remaining 50 percent funding for this PACS system was paid to Copper Basin Medical Center by Erlanger during the reporting quarter with grant funding through USDA Rural Development Distance Learning and Telemedicine program. The remaining USDA Distance Learning and Telemedicine grant funds received by Erlanger are being used to purchase remote telemedicine stations for deployment at rural hospitals and two portable video conferencing stations at Erlanger Baroness which are planned to be located in the children's hospital and the Level 1 Trauma Center.

d. Explain how the selected participant's minimum 15 percent contribution is helping to achieve both the selected participant's identified goals and objectives and the overarching goals of the pilot program.

Erlanger Health System has planned the deployment of the FCC Rural Fiber Network from the inside of their health system out to the rural partners. As part of this systemic process, Erlanger has identified necessary equipment capacity needs for the network that can grow with the network over time. This telemedicine investment along with the FCC Pilot grant supports Erlanger Health System's role as a regional tertiary care provider and a strong partner for the growth of healthcare services in rural communities. It also positions EHS to grow their network into a component of a future national healthcare fiber network.

The 15 percent matching funds contributed by BrightBridge will be invested as a pro-rata share with the 85 percent FCC funds to help achieve the goal of building the project.

7. **Identify any technical or non-technical requirements or procedures necessary for ineligible entities to connect to the participant's network.**

At this time, no plans have been developed for ineligible entities to connect directly to the network, so this question is not currently applicable.

Erlanger Health System is not aware of any issues around ineligible entities i.e. medical practices and doctor groups interfacing through Erlanger's hub/network terminus with data carried on the pilot rural healthcare network. This is important to the long term success of the system as the local public Electric Power Board (EPB) of Chattanooga is close to completing the investment of approximately $350,000,000 to extend high speed fiber ("last mile-fiber to the home") to all of their 170,000 customers throughout their 600 square mile urban/rural service area which is where the vast majority of tertiary care medical specialists are located (both offices and homes). The ability of these specialists to link to the hub or terminus of the health care network at Erlanger through EPB's network is vital to the long term success of the project and critical to the ability of the network to respond effectively in a crisis or large scale medical emergency as envisioned by HHS or the CDC.

We are assuming that if the FCC network terminates at the participating hospitals, then the participating hospitals can send various data to various other local locations or medical service providers utilizing other secure but non-FCC funded networks such as local area networks (LAN's), secure wireless networks, private networks, etc. We have reviewed this strategy with staff of the GAO who were researching the FCC Pilot Program and they did not indicate any concerns with

this assumption. This is a very important assumption for our network that will be critical to the success of our business model.

8. Provide an update on the project management plan, detailing:

a. The project's current leadership and management structure and any changes to the management structure since the last data report.

Current leadership for the project continues to be provided by Douglas Fisher, Erlanger Vice President for Government and Community Affairs (Project Coordinator), and Hale Booth, Executive Vice President, BrightBridge Inc. (Associate Project Coordinator).

b. In the first quarterly report, the selected applicant should provide a detailed project plan and schedule. The schedule must provide a list of key project deliverables or tasks, and their anticipated completion dates. Among the deliverables, participants must indicate the dates when each health care provider site is expected to be connected to the network and operational. Subsequent quarterly reports should identify which project deliverables, scheduled for the previous quarter, were met, and which were not met. In the event a project deliverable is not achieved, or the work and deliverables deviate from the work plan, the selected participant must provide an explanation.

The Erlanger Health System Rural Healthcare Network has faced delays in implementing the project schedule due to difficulties that have been encountered in raising necessary eligible matching funds and raising necessary equipment funding that is needed by end user hospitals to make effective use of the network. Now with substantial equipment funding in place and matching funds coming into place, Erlanger is positioned to move more effectively into implementation of the initial stage of the project. The attached project schedule illustrates the original proposed project date for key milestones and the current revised projected milestone dates.

	Original Date	Revised Date
STRUCTURE		
Documentation of commitment of network partners (partially completed)	10/15/08	7/15/10

NETWORK DESIGN		
Competitive bidding of network design	11/15/08	09/15/10
Review, recommendation and bid award	1/15/09	10/15/10
NETWORK BRIDGE EQUIPMENT (Non-FCC)		
Bid specifications for video bridge/network hub equipment	2/15/09	Finished
Competitive bidding of video bridge/network hub equipt.	3/15/09	Finished
Review, recommendation and bid award	3/30/09	Finished
Installation of equipment	9/15/09	6/30/10
CONSTRUCTION		
Environmental compliance and rights of way documentation with electric cooperatives, power boards, and other existing partners	6/15/09	11/15/10
Bid specification document	6/15/09	12/30/10
Review and approvals of bid documents	7/30/09	01/15/11
Competitive bidding of fiber construction and installation	8/15/09	01/30/11
Review, recommendation and bid award(s) for construction	9/30/09	02/30/11
Preconstruction conference	10/15/09	03/15/11
Notices of start of construction	10/15/09	09/15/11
Construction & inspection completion	8/15/10	09/15/11
Construction completion and network testing	9/15/10	09/15/11
NON-FCC FUNDED EQUIPMENT		
Preparation of bid specifications for non-FCC project equipment	10/30/08	Finished
Procurement of non-FCC project equipment	11/30/08	Finished
Review, recommendation and bid awards	01/30/09	Finished
Acquisition and installation of non-FCC project equipment at health care provider sites	06/30/09	7/30/10
Completion of testing of equipment	06/30/09	8/15/10
PROJECT CLOSEOUT		
System completed and fully operational	9/15/10	10/01/11
Project closeout	10/15/10	10/01/11
Reporting	on-going	on-going

Schedule for connecting each site to the network and operational:

All health care provider sites will be connected to the planned network and operational by 10/01/11 many will be connected well before this date.

Some sites will be connected and operational sooner. However, since this project involves the installation of fiber over miles of routes dictating a precise schedule for service by site will, based upon prior experience, result in a higher construction cost in competitive bidding. Therefore the timing and priority of site connections will be negotiated after bid award based on site needs at that time and contractor mobilization issues.

Schedule Changes:

With the recently approved project extension of one year, time is adequate to meet current USAC and FCC schedules for funding commitments. The current time line changes a little but is being achieved and we are committed to accomplishing that. This schedule reflects the original schedule submitted and the current revised schedule which is updated each quarter. It has been necessary to extend the schedule as Erlanger Health System has needed more time to raise additional needed matching funds along with raising other funds for non-FCC eligible expenses while also planning how healthcare services will be delivered over the network. EHS has also been investing considerable time in developing a basic strategy for the sustainability of the network to accommodate concerns for maintaining the economic viability of the network over time while properly observing USAC and FCC programmatic concerns. The strategy for delivery of sustainable services over the network has also demonstrated the importance of scaling the number of "partner" hospitals on the network. This need for more partner primary health care providers has in turn lead to additional local investment by Erlanger and additional grant proposal development for funding equipment at these potential additional sites. This has taken more time than originally estimated, while also impacting the facility planning process. The additional care and attention to critical detail will produce a more sustainable and viable telemedicine network over time.

Some sites selected for the USDA funded telemedicine equipment will initially be served by existing lower capacity internet connections and will provide an excellent beta evaluation for the ultimate system because not only will equipment be thoroughly vetted, processes and procedures will be tested and expanded if needed.

9. **Provide detail on whether network is or will become self sustaining. Selected participants should provide an explanation of how network is self sustaining.**

To be successfully sustained, a regional telemedicine network must meet the clinical, educational and economic needs of all participants. Erlanger Health System views the project as an opportunity to not only partner with member hospitals, but perhaps more importantly reach out to physicians and distant communities as well. We are utilizing an extensive collaborative needs assessment to ensure that what we offer and communicate to our members is precisely what is needed to extend care access and offer programs not yet available because of sparse

or dispersed populations. We continue exploring opportunities to partner with target community health and wellness agencies to pursue both State and Federal funds for initiatives that target maternal/fetal health, children's health, and improvement of critical disease states such as diabetes, stroke, obesity, cancer and COPD. Working with the agencies, we are also developing community- based health initiatives supported by the increased access to specialists and educational opportunities provided by telemedicine.

Sustainability and long term growth will be enhanced by the creation of an ongoing flow of data between network sites which will quickly demonstrate the benefit to physicians, patients and providers. The initial program focus is centered on both stroke and trauma care which are specialty services in which Erlanger is a broadly recognized leader. These are also services that are significant positive revenue generators for Erlanger and which can justify some subsidization of the telemedicine network by EHS if that becomes necessary.

Erlanger's business plan for the initial phase of telemedicine focuses on development of a regional telestroke network to expand the existing stroke program at Erlanger. The Erlanger Southeast Regional Stroke Center is a recognized national leader in three core areas: clinical care, stroke education and medical research. In March 2009, the national MERCI registry listed Erlanger as the busiest center in the United States in the performance of advanced interventional therapies. In 2007 the center treated approximately 800 stroke patients and by 2008 the number grew to 1,118. The telestroke strategy will focus on the FCC project targeted hospitals and will initially use the USDA funded equipment for patient interface. Erlanger recognizes that telemedicine programs are largely mission driven and rely on down stream revenue generated by capture of new market share as well as grants to assist with start up capital expenses. Erlanger has recently launched an extensive public information awareness program to build regional public awareness of the stroke therapies which will be the lead initial service of the telemedicine initiative.

The strongest and most effective telemedicine systems typically begin operating in support of key services essential to the health of distant communities. The stroke service is an important business unit for Erlanger Health System due to its high profile in the media as well as its excellent reimbursement, profit, and contribution margin. Erlanger projects a modest but sustainable return of $211,799 in initial year net income which will help sustain costs of the developing telemedicine network and grow with services over time.

Erlanger is marketing the planned service using a mix of both internal and external communications initiatives which include community and regional media highlighting stories and initiatives indicating how telemedicine saves time, money and lives. A copy of a recent news-advertisement about the health service is attached to this report (*Chattanooga Times-Free Press* April 28, 2010 page A11). Keeping staff and physicians informed about opportunities in telemedicine is helping create understanding and generating additional local initiatives on how to

use the network for improved and lower cost health care. One emerging local strategy is to develop an effective and innovative demonstration of the use of broadband- to- the- home for remote monitoring of patients to help minimize costly and stressful hospital stays. Additional funding is currently being sought for this initiative.

As the teaching hospital for the University Tennessee College of Medicine Chattanooga (UTCOM), Erlanger is also working with rural hospitals and UTCOM to encourage research initiatives that will leverage benefits of the network and positively impact health care across the region. This can also include necessary continuing education training for medical staff across the region.

Based on data obtained from existing networks, a key focus area for long-term sustainability is to ensure appropriate and timely reimbursement for all services to providers and physicians. The basic premise is simply "no pay, no play". Our research indicates that most systems begin sustainable operations two to two and one half years after start up. Successful systems closely collaborate, communicate and continually share updated data related to processes required for reimbursement from Medicare, Medicaid and third party payers. Our regions largest general health insurer, Blue Cross Blue Shield of Tennessee has funded a pilot telemedicine initiative with a regional physicians group to assess the opportunities and advantages of telemedicine and the insurer is positioning itself to be a regional leader in negotiating appropriate physician reimbursement for telemedicine services. As a result of these positive developments, we do not anticipate overly burdensome problems with this essential element of reimbursement for telemedicine services which is critical to network sustainability. However our start up is not conditioned on achieving this as we intend to earn initial revenue downstream in the patient care cycle by growing market share and by marketing initial excess capacity to help underwrite operational and maintenance costs.

Because the network infrastructure is being developed in phases, we continue aggressively to build on our ongoing efforts to acquire grants from state and federal funds, not -for- profit foundations and interested donors.

Additional Quarterly Report Questions for Item 9:

1. Which scenario's fit your project?

Scenario # 2, Participant owns 100% of dedicated network; Excess bandwidth is owned by participant for current or future use by other network members.

Since we expect our network to continue to grow over time in both connections and content we are planning to run a minimum of 12 to 24 strands of fiber to our rural hospital locations. This will be more fiber than initially needed, but the system is expected to grow into this over time as new health care provider locations are served and new health care services are developed which will grow network traffic.

As a result, Erlanger Health System is anticipating leasing some of the excess fiber on an interim basis to generate revenue and services to exclusively fund the operation and maintenance cost of the rural healthcare fiber network during the early years of operation. Discussions with local non-profit utility systems indicate this is feasible. This is critical to sustaining the network in the early years of operation after the pilot program while network applications and network traffic builds to an expected self sustaining volume. Project staff continues to research other models to determine appropriate ways to charge for products and services that are a function of the network.

2. Source of 15% funding.
Erlanger Health System is bringing a non-profit group together to manage and maintain the actual fiber network. BrightBridge a non-profit regional economic development organization in this partnership is providing the 15 percent matching funds. BrightBridge is an SBA certified development corporation that has been involved in the development of EHS's telemedicine network since the beginning. Bringing together regional partners for the matching funds is essential in these difficult economic times.

3. Commitments from Network Members.
The BrightBridge Inc. Board of Directors has taken board action approving the commitment of necessary matching funds for the FCC grant. Verbal commitments have already been secured from initial rural hospital network participants and Letters of Agency are currently being compiled to submit to USAC. There is no plan at this time to put a mandatory time frame on length of participation in the network as the network is planned to be market driven by demand for services with no cost of entry to eligible participants, only cost for on site connectivity and pro-rata share of network operation and maintenance that is not covered by telestroke income and the revenue generated from interim leasing of excess fiber.

4. Sustainability Period: Will you be able to supply plan/budget of at least 10 years.

Erlanger Health System is planning the rural health care fiber network and telemedicine system to be an integral and permanent part of the on-going health care system and not as a temporary pilot project. Staff are presently compiling a sustainability plan.

5. Budget attached to Sustainability: We are working on a business plan which will include development of network financial projections and a network operation and maintenance budget.

6.Use of the Network by non-eligible entities.
Erlanger is currently planning to link rural eligible non-profit health care providers in the FCC funded rural healthcare fiber network. To expand or scale the telemedicine network and reach other rural hospitals in Erlanger's multi-state health catchment area, Erlanger Health System will continue applying for additional

funding from various sources (USDA, ARC, foundations, etc.) for the acquisition of basic telemedicine equipment to be placed in approximately a dozen additional hospitals beyond the original scope of the project. These additional hospitals will be linked to the FCC funded EHS network at various points by other existing broadband providers. Several of these newly proposed rural health care partner hospitals are private for profit and will require the development of a fair share fee schedule to access the network. The general strategy will be to assess a fair share one time initial access fee for joining the network for non-eligible (for –profit health care provider) entities. These entities will also incur their own additional expenses for linkage to the Erlanger network and will share equally in network system operation and maintenance costs with other participants.

Erlanger or a partnership of Erlanger and other non-profits or public entities will own all the fiber constructed with the FCC funds. Erlanger expects the usage of the network to grow substantially over time as new telemedicine health care initiatives and applications are developed and deployed over the secure network. As a result excess bandwidth is planned in initial construction for future use by network members (Scenario # 2). It is anticipated that this initial excess capacity will be leased where possible in the early years for non-health related purposes with all revenues being used to sustain the network. As health care network demand grows over time, excess bandwidth leased at arms length to other parties will be reduced as needed.

7. Management of the Network
Erlanger Health System plans to focus on managing the network content (health care services) and plans through its non-profit partnership to contract with a qualified public non-profit utility(s) to manage and maintain the physical system network. Erlanger will also maintain ownership of telemedicine stations installed at rural hospital locations and will be able to maintain this equipment more cost effectively through vendor service contract(s).

8. Continued RHC Funding:
At this time there are no budget projections derived from participation in the regular Rural Health Care program.

9. State and Federal Funding:
As noted throughout the report, Erlanger Health System has been actively pursuing state and federal funding to add equipment and fiber to the network. This will continue relentlessly until the network is fully developed with service to all hospitals, public primary care centers, and public health departments throughout the multi-state service area of Erlanger Health System. Erlanger Health System has already secured additional federal funding needed to equip rural hospitals in the initial FCC funded project with interactive telemedicine stations. Initial telemedicine station equipment purchase costs have been a little lower than projected costs, so EHS hopes to be able to equip a few more of the hospitals in the

FCC project through these savings. Additional grant funds are being applied for to add a second phase of telemedicine equipment to more hospitals.

As previously mentioned, in late October, one of Erlanger's existing service providers, the Electric Power Board of Chattanooga, received a funding commitment from DOE of slightly over $111,000,000. This ARRA grant among other accomplishments will assist in the completion of high speed fiber build out throughout the seven-county EPB service area. While not a direct part of our FCC funded rural fiber network, this DOE investment with EPB's matching commitment will tremendously boost our ability to reach outlying areas and provide comprehensive access for our rural hospitals through our network and interface with the EPB network to an extensive range of specialist medical care in the urban service center around Chattanooga.

10. Prepaid Lease Option:
Prepaid lease options are being considered along routes where this is a potential option.

10. **Provide detail on how the supported network has advanced telemedicine benefits.**

Erlanger Health System is continuing work on planning the physical and programmatic structure of the network by hiring staff and committing hundreds of thousands of local dollars to the effort. Funding of this pilot project and the on-going project planning has catapulted telemedicine to a realistic opportunity in our regional medical community. The FCC grant has generated extensive discussion in the regional medical community on how best to use telemedicine to improve the quality of health care and drive down costs. Also as a direct result of this project one private medical group has already moved to raise foundation funding for delivery of demonstration telemedicine consultations through leased lines to remote rural residents for specialty needs in perinatology. This particular example can provide new access in remote rural communities to specialized services needed to effectively deal with problem pregnancies which result in higher infant mortalities in the network service area. Plans have also been developed for providing stroke consultation services from Erlanger's stroke center to primary health care locations in the region and linking the level 1 trauma center specialists at Erlanger's Baroness Hospital in Chattanooga to the rural hospital emergency rooms for real time consultation and determination of treatment options.

The regional focus on telemedicine has also lead one partner hospital, Murphy Medical Center in Murphy North Carolina to plan the development and seek funding for a local area telemedicine network which would link all of there primary care practices in three mountainous counties into a small rural health care network that in turn would be linked through Murphy Medical Center to the broad range of tertiary

care specialists at Erlanger Health System. Erlanger collaborated closely with Murphy Medical Center in development of that proposal.

Oddly enough, long term major road closures due to landslides have recently become an increasingly common problem in the mountainous tertiary health care service area of Erlanger. Recent major mountain landslides along I-40 and US Highway 64 have simultaneously closed both of these major corridors through the Appalachian Mountains for months (November 2009-to mid April 2010). These new transportation disruptions dramatically reduced access to specialty medical care through some rural hospitals such as the Copper Basin Medical Center, and Murphy Medical Center as Doctors and patients could no longer efficiently travel to and from the Chattanooga area in these impacted rural locations. This sudden interruption in specialty medical care is also having a very negative financial impact on some of the rural hospitals. These adverse and uncontrollable disruptions have generated additional support for deployment of the Rural Healthcare Fiber network which has the capability to significantly limit the adverse health and financial impacts of these sudden and severe transportation dislocations.

Public Health Departments across the service area have also expressed an interest in linking with the network and have been collaborating in seeking additional funding to expand the planned network.

Blue Cross Blue Shield of Tennessee the dominant health insurance company in Tennessee has also began to study how to encourage preventive care using tools such as telemedicine and they are taking steps that in the future may result in paying for certain telemedicine services.

As circumstances evolve and plans are further developed for the network, more regional opportunities for telemedicine applications will surface and will be reported in future quarterly reports.

11. **Provide detail on how the supported network has complied with HHS and IT initiatives:**

Since the network has not been constructed and is not operational at this time, this is not applicable. However staff involved with the Pilot project have participated in training sessions presented by HHS staff through USAC sponsored training and are continuing to learn more about these initiatives and the opportunities they present.

12. Explain how the selected participants coordinated in the use of their health care networks with the Department of Health and Human Services (HHS) and, in particular, with its Centers for Disease Control and Prevention (CDC) in instances of national, regional, or local public health emergencies (e.g. pandemics, bioterrorism). In such instances, where feasible, explain how selected participants provided access to their supported networks to HHS, including CDC, and other public health officials.

Since the network has not been constructed and is not operational at this time, this is not presently applicable. However, as previously mentioned in Section 7, the ability to interface the Erlanger rural healthcare fiber network through the Erlanger main campus hub with the EPB fiber network system which will reach every doctor's office and every doctor's home (along with every other address) in their six county service area will provide unparalleled regional opportunities for 24/7 remote rural telemedicine access in instances of national, regional or local public health emergencies such as pandemics, natural disasters, or bioterrorism.

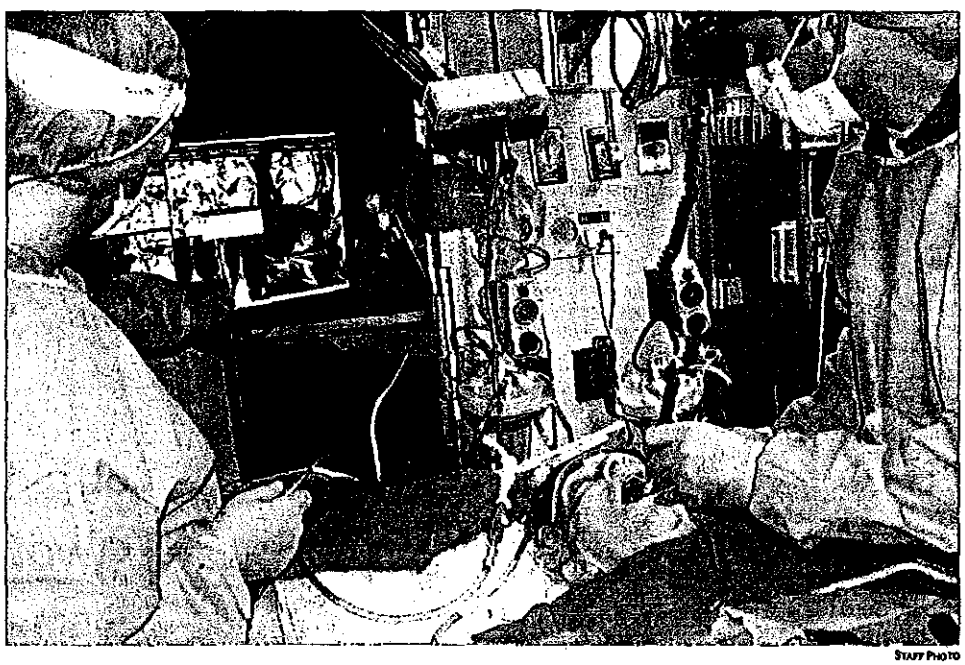
/Attachment

HEALTHNEWS

ERLANGER BLOGS: Video, photos, and more detail about these stories are available online at http://community.erlangerhealth.org

Erlanger takes leading role in international stroke research

Online: Learn more about Erlanger's stroke program at www.erlanger.org/Stroke



STAFF PHOTO

Dr. Tom Devlin, left, and Dr. Peter Hunt implant the Brainsgate device in an Erlanger stroke patient, communicating in real time with the Israeli developers through telemedicine capabilities.

BY SUSAN SAWYER
HEALTH NEWS WRITER

Chattanooga, Tenn. - Erlanger Health System has become the first hospital in the United States to implant a novel device in a stroke victim which may eventually allow the window for stroke treatment to be extended from 8 hours to 24 hours.

The BrainsGate device utilizes a new approach to stroke treatment by stimulating blood vessels deep within the brain, causing them to dilate and to increase blood flow to areas involved in the stroke. This unique device, the product of an Israeli company, is inserted during a surgical procedure in the roof of the patient's mouth.

Erlanger has not only taken the lead in the United States, but throughout the world, in this international stroke research study. One of six U.S. hospitals participating in the clinical trial, Erlanger has completed more BrainsGate implants than any other hospital in the world—including stroke research teams in Germany, Spain, and Hong Kong.

Last year, the Erlanger surgical team, led by Dr. Peter Hunt, otolaryngologist with Associates in ENT, Head, and Neck Surgery, performed the first BrainsGate device implant in the U.S. Last month, the same team became the first in the U.S. to use a new high tech Guideview Navigation system specifically designed to facilitate device implantation. The Erlanger team used the international audio-visual telemedicine capabilities of the new Guideview System to consult with the Israeli-based representatives of BrainsGate through real-time Internet connections.

"The BrainsGate Ischemic Stroke System could be a stroke treatment breakthrough," asserts Tom Devlin, MD, PhD, Medical Director of the Erlanger Southeast Regional Stroke Center and principle investigator for this research trial. "The procedure is designed to help save brain tissue and to improve outcomes by augmenting the reversal of damage to the brain during a stroke. Preliminary studies are extremely promising that the device may provide significant improvement in the outcomes of our acute stroke patients."

Thomas Devlin, MD

Peter Hunt, MD

"Given the fact that the incidence of stroke in the Chattanooga region is well above the national average, the development of new technologies to treat stroke are of the utmost importance to our community," Dr. Devlin explains. "Our participation in this investigational research trial will help determine just what benefit this new technology may provide to our stroke patients. The preeminent reputation of Erlanger as a major stroke research center allows us to partner with the best companies from around the world, now facilitated by telemedicine, to aggressively seek new cures for stroke."

LEARN HOW TO "STOP STROKE"

Learn more about stroke research and treatment at Stop Stroke Saturday on May 1 at Erlanger East. Register for this free seminar by calling 423-778-LINK(5465).

Erlanger & Sodexo Introduce Certified Gluten-Free Meal Program

BY KATIE NAVE
HEALTH NEWS WRITER

Individuals who must avoid grain-based products in their diet now have expanded menu choices at Erlanger–the first hospital in the U.S. to offer patients a certified gluten-free diet option.

creasingly common condition and to also provide comfort and support for gluten-intolerant patients.

"Gluten-intolerant patients are often concerned that they may not receive the diet-appropriate menu choices when they are admitted to a healthcare facility."

gluten is made even more difficult by the fact that it is the common denominator in most grain-based products, such as cereals, breads, and pasta.

More serious gluten intolerance is known as celiac disease (CD), an autoimmune digestive disorder that affects both children and adults.

ated nutritional and immune-related disorders. Even small amounts of gluten in foods can affect those with CD and cause health problems, making the need for isolation of food preparation crucial.

"Partnering with Sodexo to bring a safe hospital experience to gluten-free patients is

storage, preparation and assembly areas. Staff members undergo thorough training and are awarded certification before preparing gluten-free trays. As an added step of precaution, designated "gluten-free" red chef coats are also worn while preparing and serving trays to patients.